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—DEVOTED TO—  
 Agriculture, Horticulture, Live Stock and Rural Economy,  
 THE OLDEST AGRICULTURAL JOURNAL IN MARYLAND, AND FOR TEN YEARS THE ONLY ONE.

## AND NEW FARM.

Vol. XXV.

BALTIMORE, May 1888.

No. 5.

### WAIT A BIT, AND DINNA WEARY.

'Twas a little Scottish maiden,  
 When or where I do not know,  
 Spoke the quaint words richly laden  
 With a truth that all should know.

Turning to the Northland dearie,  
 What is patience? some one said;  
 "Wait a bit, and dinna weary,"  
 Thus replied the little maid.

Ah, yes; wait a bit—the morrow  
 May chase all your fears away;  
 If to-day is filled with sorrow,  
 Dinna weary, 'twill not stay.

Though the way seems long and dreary,  
 And the soul feels lone and chill,  
 Wait a bit, and dinna weary,  
 There's a balm for every ill.

What if storms are breaking o'er us,  
 There's a rainbow after rain;  
 And though all is dark before us,  
 Soon the sun will shine again.

If the shaft of disappointment  
 Strikes us like a poisoned dart,  
 Patience is the sovereign ointment  
 That can heal the wounded heart.

Time will change each sad condition,  
 Lift again the drooping head,  
 Give, perchance, to hopes fruition,  
 That were long ago thought dead.

Let us then be calm and cheery,  
 As we seek life's golden shore,  
 Wait a bit and ne'er grow weary  
 'Till we need to wait no more.  
 —*Brooklyn Times.*

### FARMING FOR TO-DAY.

Large farms, broad fields, expensive machinery driven by steam or managed by large, heavy teams, agricultural implements requiring hundreds of acres of grain to make their use profitable, all belong to the West. Our many Western subscribers will know that we do not forget these facts. We glory in those large reaches of wheat and corn, which there justify the largest expenditure in implements and machinery. Steam plows and heavy harvesters and everything of the largest and best and most costly belong to the large farms of the West, many of which

are about equal in fertile acres to some of the principalities of the old world.

And notwithstanding all this we wish to speak particularly to the farmer readers of our Magazine in the States along the Atlantic Seaboard, and to urge upon them a few of the ideas which have been growing stronger and stronger in our mind as the years pass by. In these States, the time of large fields of grain we believe to have passed away, if any real profit is desired by our farmers. Something must take the place of these and a very different method of farming must be pursued. This has become a settled conviction with us, and the only question is, what shall this method be for the farming of to-day, and how shall it be carried forward?

Our first idea is to cultivate much less ground with the plow; but make what is cultivated rich and productive to its full capacity. In this grow such crops as will be the most profitable in the best markets of the country; and whatever is needed for home consumption. In carrying out this idea, where much land has heretofore been under the plow, seed it down to grass and keep stock for the larger portion, and turn many acres into orchards of the best fruit in pears, quinces, apples and peaches.

Carry much stock of various kinds and of the best character, not forgetting the value of ensilage in their keeping. Stock under these circumstances can be made to supply nearly all the fertilizer you will need on the acres which are broken up, and are themselves a source of revenue of no mean character. Bear in mind that the fertilizer from them almost equals the value of the feed you are obliged to supply for them, and the growth and increase become nearly all profit.

The land in orchards will always be profitable if the fruit is judiciously chosen, the orchards properly cared for and a little

attention paid to the marketing of the fruit. For many years to come, longer than any of us now living may number, the demand for all the fruit of good quality which can be raised will remain good. The natural increase of the population is vastly greater than the increase of the standard fruits and is likely to remain so. If this country should, however, be overstocked; we have a foreign market continually calling for our produce of this character. The world is open to us. Apples only moderately fine have brought by the barrel at least a dollar a bushel all winter. Orchards are destined to be a good investment.

Then comes the great field of small fruits; but we must not enlarge upon this subject now. We would refer to former numbers of the magazine for particulars. A great source of profits for labor bestowed is certainly here, and a very small attention to this branch of farming has hitherto been given.

But the best source of profit to the farmer of to-day is to be found in truck farming. The cultivation of comparatively few acres, brought to a high state of productiveness, put into crops of vegetables of various kinds, such as sweet corn, potatoes, tomatoes, onions, beets, cabbage, celery, asparagus, peas, beans, &c.—and placed on the market in an attractive manner.

For the Atlantic seaboard, this outline gives very briefly the true farming of to-day. And we believe the time is very rapidly approaching when successful farming here cannot be done in any other manner. Grain farming must be thrown aside, for it does not now pay for the commercial fertilizer which must necessarily be used upon it—it can only be raised here at a loss.

Specialties, if not depended upon as sole crops, will always repay study and labor. Grapes may be made a specialty; but they



will sometimes utterly fail. Peaches may be of great value; but they too cannot always be successful. Berries will occasionally be smitten by the frost or perish as a crop from prolonged drought. Orchards during some years are quite barren. Any particular vegetable crop might prove a failure. It is not any one of these therefore as a specialty that can be recommended; it is the combination of all of them in the system of farming of to-day that should be our reliance. Each specialty, well understood in all its requirements, is certainly a desirable thing on the farm; but when all are united, no danger can menace the farmer, and he can rest assured that he has in his hand some arrow which will reach the mark and bring him a reward for his labor.

Plow less ground. Make it garden ground. Grow there large crops of marketable produce, of a great variety. Allow the balance of your lands to support stock, to grow fruits in orchards, to rest in fields of grass and pasture, until it can be made of like richness and profit as your garden acres. This must be the farming of to-day.

#### A GREAT DANGER.

It is hardly possible to exaggerate the danger that confronts our country in the financial combinations now so generally known as "Trusts." They are the invention of those fertile brains which wish to accumulate fortunes without work and in the shortest possible space of time, regardless of the rights of others or the obligations they are under to their fellow men. In our sight, they are wholly averse to moral principle, and against the genius of those principles which lie at the basis of our country's institutions. They disregard the obligation of good to the

masses, and prey upon their substance without a moment's thought of the havoc they make in the homes of the poor and dependent classes.

In a mild form they have existed for a long time in the different combines to sustain prices of the different commodities required for general consumption; but this without the pooling of capital leaving each dealer at liberty to carry out his own plans, and do his business in his own methods. Even these, however, often bore very heavily upon the poorer classes who suffered in the purchase of coal kept up to an arbitrary standard, or who were forced to do without some of the ordinary provisions of common life.

These "trusts" however are a vastly greater-instrument of monopoly and torture. They gather millions of capital with the avowed purpose of oppressing those who will not join them, and of raising the prices of all the common necessities of our daily lives. With their millions of money they are enabled to brazenly defy the investigations of legislators until nothing tangible can be depended upon as a remedy from State or Congress. At least, the delay in supplying a remedy is now so prolonged that the people see no end to their impositions and no prospect of legal relief.

We are blessed with the vision of "trusts" connected with every article we use, or are forced to purchase, piling up the prices to the consumer and at the same time grinding down the producer till the latter is in despair and ruin, while the former is worse off than any serf in the old world or any slave in the new.

This work promises, also, to go on until the masses shall arise in a revolutionary spirit and overthrow or demolish these vast monopolies, causing a more gigantic war than our last one; for the aggravation is fully as great and the masses affected are

vastly more intelligent and more generally distributed throughout the country. It is giving a foothold to those who are ever ready to plunge any people into the abyss of anarchy.

We have indeed a great danger in these "trusts" and it is time that this danger was realized by our legal bodies in all our States, and measures taken to ward against it. The great fact stands against "trusts" that they are unprincipled, inhuman, immoral; that the very ground upon which they are built up are that they have no responsibility to regard the wishes of man or the laws of God. They are at war with the good of society and with every humane consideration, only looking to their own selfish profit, though it be brought about by the ruin and anguish of myriads—the ruthless crushing out of every interest opposed to theirs.

A fearful danger is menacing the peace and prosperity of the country and we cannot too soon have a remedy against it.

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#### ABOUT IMMIGRATION.

Considerable time was spent during the last session of the legislature upon the subject of immigration and the appointment of an immigration Commissioner who should visit Europe and turn the attention of immigrants to the advantages of Maryland. We watched with a great deal of interest the discussion of this subject. We think a law could be framed, whereby a part of the salary of a commissioner should depend upon the number he might induce to visit and settle in this State. Such a law would operate as an incentive to labor and would thus be productive of good. Without this provision and with an ample salary from the State Treasury the experiment has been a failure; but giving this element of condi-

tional gain it might turn the tide and make it a decided success.

One thing the discussion revealed was well worthy a passing notice—that plenty of fertile land could be had in Southern Maryland for the trifling sum of two dollars an acre, and from that up to ten dollars according to location—that these lands were in healthy localities and were only awaiting industrious and working immigrants to turn Southern Maryland into a garden to supply our Northern cities with early vegetables and fruits.

These facts should be generally circulated throughout our own country by comments of the newspaper press of our own State, and by a studious care of our people to get these papers and statements into the hands of the people of the more northern sections of the land. The climate of Southern Maryland is delightful and, as in the case of the far South, this region should have the benefit of a decided "boom." The entire State of Maryland should indeed partake of the general prosperity which is now making the South the scene of phenomenal enterprise.

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#### THE COLLEGE.

The appropriation of \$6000 annually by the State to the Maryland Agricultural College for the two years to come is an act of justice which has our hearty commendation. We should have been much better pleased, however, had a clause been added of \$200 additional for each county of the State to pay all the expenses of one student from each county. But we shall be thankful for little in the hope of more to come.

The acceptance of Prof. Alvord of Connecticut, of the Presidency of the College follows as a matter of course and we hope every paper in our State will have a good word to say in his behalf, to

strengthen his position among us, and give the College a strong send off under his management. it can bestow upon those who may enjoy its advantages.

The College farm is not in a very rich or inviting condition at present; but the great variety of soil of which it is composed makes it the very best locality for experimentation; while when properly fertilized and worked it will be a farm which should show to the very best advantage how easy it is to make farming a success.

We shall not be satisfied until the College farm shall every year be a source of generous income to the institution. We do not care how much may be sunk in the acres which shall be attached to the Experimental Station; for experiments five times out of six may be expected to be failures. Money buried there is only bringing the actual experience which must thus be acquired. But where the regular farming is prosecuted, aside from experimentation, an income must be visible. Teaching agriculture to young men, without demonstrating the successful farming, would be a mockery and must not be tolerated. They should be taught practically the work of the farm, intelligently the principles involved in successful culture and growth, and the business knowledge of successful buying of farm necessities and the selling of farm products. Piecemeal education in agriculture is not what is needed in such an institution; but young men should be turned out, who could take charge of a farm at once and manage all its details, and become a power in every community amid which their lot may be cast. We hope our College will have this mission for our State, and we bespeak for it such an earnest support from farmers everywhere, that it will only be a question of how high a standard it can give to its farmer graduates, and how great a blessing

#### OUR OWN ITEMS.

The farmer who expects to learn everything about farming by his own personal experience, should farm 200 years at least, and will die poor in his last furrow. Make use of every other farmer's experience, gathered in our agricultural journals.

\* \* \*

Some farmers suppose economy is to cut off the food of family and stock, to deprive home of its comforts and the barn of repairs, to take clothes away from the household and blankets from the horses. We call this the worst kind of extravagance, short-sightedness and folly.

\* \* \*

Wife and children should be consulted often and freely by every farmer who would make his farming a success. They will take as much interest as he does in the outcome of the year's labors.

\* \* \*

A great many good things exist, of which you, my friend, have never yet heard—so, when you are told of a new method of work, don't condemn it positively until you have tried it. New things may often be worthless, but sometimes they are of great value.

\* \* \*

If you have failed of desired success in last year's farming, study well the cause and remedy it this year. Home comforts are seldom the cause; but the greatest causes are in your mismanagement of crops and their sale; or in your personal habits and extravagances.

\* \* \*

The great principles of Agriculture are the same in all parts of the world and



truths of cultivation, enrichment and general work belong everywhere. Only the little special details of time and the management of localized crops differ.

\* \* \*

"The poor are getting poorer and the rich richer," is the biggest nonsense that gets believers. The poor in this country are continually changing places with the rich, and the rich man's sons are continually becoming miserably poor. Comfort is more widely distributed to-day than ever before.

\* \* \*

Monopolists are the greatest pests which farmers have to contend against. Insects, blight, drought and floods are bad enough, but monopolies upheld by law are a thousand times worse. The natural pests we can destroy or guard against and save some of our crops, but the monopolist gobbles up the proceeds of the crop and often swallows the farm into the bargain.

\* \* \*

We do not advise farmers to become politicians and neglect their farms; but we do advise them to see to it that they are represented by farmers in the legislatures, in congress and wherever laws are made or money appropriated.

\* \* \*

Mrs. John Green's squib on saving food in our last number shows the folly of exaggerated statements. A warm stable saves a very small portion of food, but the animals are much more comfortable and profitable to the farmer. Dehorning saves a very small portion of food, but quiets the herd when at water or eating and avoids serious injuries to stock and to keepers. Plenty of fresh water saves a little food, but makes the stock vastly more healthy and contented.

## ANOTHER FRAUD.

Our attention has been called to a paragraph going the rounds of the papers on victimising farmers in various parts of the country. When will farmers learn not to sign any paper for strangers? Never to put their name to a receipt for goods left with them by strangers? If strangers wish to leave goods, let them do so at their own risk, or let them take them elsewhere. "The new rascally scheme is the hayfork sell. The operators have been at work in Pennsylvania and New York, and are likely to ply their nefarious business elsewhere. Their mode of operation is to store a number of forks in the barn of some farmer, telling him that they are the remainder of a large shipment, and informing him that if he can dispose of them he will be allowed a commission averaging from thirty to seventy-five per cent. The farmer agrees to become responsible for the goods, and is persuaded to sign a "receipt," which they are careful he shall not read, and thirty days later he is called upon by an accomplice of the seller who demands quadruple payment for the forks, and shows the farmer's agreement to accept them at that price. Kick? Well, he may, but he pays the demand all the same, at last. An honest farmer stands no show in dickering with a swindling city sharper."

## AN OLD DILEMMA.

A reader of THE WORLD in this city sends us this note:

"I am a married man, twenty-eight years old, strong and willing to work, though having no trade. By doing odd jobs my wife and myself have managed to get through the winter alive, but with an amount of hardship and suffering that I don't want to encounter again. Do you



think we could better our condition by going into the country?"

That depends, we should say, upon what you can do and will do. There is a limited but generally active demand for outdoor laborers on the market gardens and farms within fifty miles of this and other large cities. Men who understand this work, or who are apt at learning, and are willing, industrious and temperate, can almost always do better at it than in picking up "odd jobs" in the city. There is too much and too low-down competition at the latter business to make it inviting to any self-respecting and stalwart young fellow of twenty-eight.

The city is a dreadful place to be poor in. Its tenements are wretched, and all the conditions for living decently are against the people without money or respectable earnings. And yet a large proportion of the poor would not be contented in the country. They are intensely gregarious. They like the companionship and excitement of the town, even if they must live in dirty and cheerless quarters. For those who love the quiet and peace of the country, and who have the faculty of turning their hands to the kind of work that it requires, the rural life is more comfortable, as it certainly is more healthful and rational. The dilemma of our correspondent is an old one, and can hardly be answered in specific cases by generalizations.

\* \* \*

The above taken from the *New York World* tells a very truthful story as far as it goes. We believe the thousands of families who are now in the condition of this one, would decidedly improve their prospects by moving into the country. The man should seek a place, even if for the first year at merely nominal wages, until he learned somewhat of farm work, and then he could easily obtain good wages,

and very soon be enabled to strike out for himself, either by hiring a farm or purchasing one on time. Every city of any considerable magnitude gives many a family of the above description, who gets a miserable living, in the winter half freezing and half starving, who would in a very few years have comfortable homes if they could go into the country with the purpose of staying there. The industrious, willing and temperate man is sure to prosper, especially if intelligent enough to write such an inquiry as this one in the *World*.

#### POINTERS FROM EXCHANGES.

The *Orchard and Garden* for December made prominent the Idaho Pear; from specimens received placing it far above all other pears now in existence as to size, flavor, hardness and other desirable qualities. Meech's Quince occupies the post of honor in January. In February the Russian "Yellow Transparent Apple" is given in a fine illustration and highly commended. The March number opens with Plums, and pictures the Russian "Ogon" and the American "De Soto," both practically curculio proof and enormous bearers. With April we find the flowers predominant and "Our Pet Pansies" are in full display. The work is in all its parts devoted to the great value of fruit culture, making a specialty also of small fruits.

The *Prairie Farmer*, commencing with March 3rd issue, has given a very much needed exposition of Farm Renting. That first issue contained sixteen valuable essays on the subject, while the issue of March 31st contained the legal points of Farm Renting. These articles are needed by every farmer who leases land and should be in the hands of both landlord and tenant.

The *Rural New Yorker* for some time past has been making a specialty of comic

and caustic pictures on agricultural subjects. Some of them have been excellent; some of them rather deep for the generality of farmer readers; all of them better than we could do; for ours would be worse than the poorest of these. This is saying much; for we can be both comic and caustic even if our friends don't give us credit for it. As we looked at the Cardinal Strawberry in March 24th issue, we could hardly make up our mind whether it belonged to the comic series or not.

With April 7th, we were delighted as all lovers of the beautiful must be who receive this "Rose Special."

The *Orange County Farmer*, March 29, gives an exceedingly pointed editorial on a part of Professor Wiley's testimony before the Senate Agricultural Committee. It seems this Professor Wiley started the canard about artificial honey comb and honey, which did so much injury to the honey industry, which he acknowledged afterwards to be a joke. According to this editorial this professor thinks lard from hogs dying of diseases is just as good as any lard, and "he presumed he eat it" and "would as lief eat it" as any lard. The good Lord deliver us all from this kind of government chemistry.

The *Springfield Farm and Home* has done good work during the past on special points of legislation, especially in the field of the Hatch Bill for Experiment Stations. It has recently devoted considerable energy to the subject of fractional currency and the modification of Postage on seeds, bulbs, cions, etc. These are objects which will greatly benefit the farmers of the country and they of course have the weight of the agricultural press generally in their favor. The Postal laws of the country are greatly in need of amendments, for they are full of the greatest absurdities. A monthly magazine can be sent from California to any of our Atlantic

cities and will be delivered by carrier for one cent a pound: but a magazine published in the city cannot be delivered short of four cents a pound. Seeds can be sent from Canada at four cents a pound and delivered anywhere in the U. S.; but if sent from one of our own post offices sixteen cents a pound must be paid!

The *Massachusetts Ploughman* makes the Farmers' Meetings and the discussion of general and special farm topics a great and prominent article of its creed. It gives a decidedly useful character to the first page of this paper. Its late discussions on Poultry were particularly interesting and gathered together very large numbers of prominent men; but all its topics in these meetings are so handled as to bring them up to the advanced standard of agricultural knowledge.

*Vick's Illustrated Monthly*, for April opens with an article commending in an intelligent and appreciative way the establishment by everyone who has the room for it, in city or country, of a vegetable garden. Mostly devoted to the culture of flowers, with now and then earnest words for horticulture, this making the leading article on the useful side of gardening is an additional attraction for its readers. We are always pleased to look upon this magazine, and the number for April is more interesting to us than usual.

CONTENTMENT passes wealth. You are sure to be contented with the use of Warner's Log Cabin Extract, for external and internal pains. This is better than to employ a physician who cannot do more for you if you had the wealth of Croesus. Two sizes, 50c and \$1.

Subscribe to the MARYLAND FARMER, with a premium, only \$1.00 per year.

## FARMER JOHN.

BY J. T. TROWBRIDGE.

Home from his journey, Farmer John  
Arrived this morning safe and sound.  
His black clothes off and his old clothes on.  
"Now I'm myself," says Farmer John.

"For, after all," said Farmer John,  
"The best of the journey is getting home.  
Iv'e seen great sights; but would I give  
This spot and the peaceful life I live  
For all their Paris and Rome?"

"Iv'e found out this," says Farmer John,  
"That happiness is not bought and sold,  
And wealth isn't all in gold,  
But in simple ways, and sweet content—  
Few wants, pure hopes, and noble ends,  
Some lands to till and a few good friends—

\* \* \* \* \*

That's what I have learned by going away."

For the Maryland Farmer.

## SOURCE OF CARBON OF PLANTS.

Sir J. B. Lawes has written an article on this subject which I have carefully read as I do everything coming from him, much as I have differed from him regarding the use of purchased nitrogen. Regarding the source of carbon found in such large quantities in both the animal and vegetable kingdom, I do not think anyone doubts but what the source of the carbon must be in the small amount found in the air—one part in seven thousand in the form of carbonic acid. The difference between us is that he claims that his 2900 pounds of carbon (charcoal) found in his wheat and straw per acre reached these through the leaves, by the power they have in sunlight of decomposing this carbonic acid and transforming it to water, or hydrogen and oxygen forming a new compound from the inorganic elements.

In the early development of life, when the seed sends out its root, the cells of

which are filled with protoplasm, the question can be asked whether the supply of carbon comes through the leaves, descends as organized matter to the roots to build up woody matter, &c? or, whether the starting point of this appropriation of carbon for this peculiar transparent liquid, is in the roots? This liquid is found in every cell down to the lowest root, and is similar in composition to the albumen found in the animal kingdom—composed of carbon, hydrogen, oxygen, lime, phosphorus and sulphur, with a little nitrogen—out of which comes a tiny fish or a whale, a humming bird or an eagle, a monkey or a man, in due time when all conditions are complied with.

If this liquid is the starting point and the transformation takes place in the roots, then will be seen the importance of a full supply of carbonic acid being near the roots, so that the main elements of protoplasm—carbon and water—can go on and in due time produce the sugar, starch, gluten, gum, fat, oils, resins, ligneous, cellulose or woody matter and the thousands of other organic compounds found in the vegetable kingdom.

And if the carbonic acid is appropriated in this manner it is clearly seen the importance of a porous, open soil which will admit the free entering of the circulating air, moisture and heat to secure a rapid development of vegetable matter in the shape of food to sustain animal life; and will explain why a soil filled with vegetable mould is always productive and fertile, while in such a soil the atmosphere is entirely different from that above—being rich in nitrogen and carbonic acid, the latter collected from the falling rain and held by the peculiar mechanical attraction that carbonaceous matter has for moisture and the acid.

Not only has this carbonaceous matter an attraction for gases, but it is a solvent for mineral matter, as is well known to



every chemist; and to secure this acid there is no other medium except through some organic matter—let it come from the small mould lichen, fern, roots and stems of the worthless weed, or the more advanced pea, clover or grass. No farmer has failed to see the effect of such matter on a poor, worn out mass of sand and clay, when to all appearance the land was as barren as the deserts of Arabia; showing that the mineral elements were there; but motionless or in a latent state.

A letter from a prominent farmer from one of the lower counties of the Eastern Shore stated that the shatters of their pine woods were making their farmers rich. They are paying from \$15 to \$20 per acre for the right of gathering them from the woods and hauling to their compost piles, which in due time are spread on their land and turned under. From this county alone a commission merchant told me that he had handled eighty thousand barrels of potatoes this season; that during the season from twelve to fifteen thousand barrels of sweet potatoes were landed weekly on the wharf, and that the two counties, Accomac and Northampton, furnished more sweet potatoes than all the rest of the United States together, and they are not large counties. The railroads passing through this section have potato depots every three miles, from which points they are carried to all parts of the United States, and their quality none dispute.

During the past season a number of crude experiments were undertaken to find in which way the current of sugar moved; i. e. from the roots to the leaves or from the leaves down. Corn stalks were cut off near the shooting ear with little sign of sugar, but near the ground the stalk was full of it. Without the chemical tests, the house flies were used: The stalk was placed on the table and quickly the lower

end of the stalk was covered with them while the upper cut was avoided. The taste will also indicate where the sugar is. I am told that in the sugar cane the richest portion of the organized sap is near the soil. I could name a number of indications of highly organized matter only found in the roots, never in the leaves; also, matter found in the bark, with no sign in the leaves. If, however, the leaves organize the mineral matter the new compound ought to be present.

Taught the same idea as Sir John, which was advanced in the last century by Priestly, that the leaves secured all the carbon found in the vegetable kingdom by decomposing the carbonic acid found in the air by the aid of sunlight, I found it hard to take this as granted in the face of certain facts that seemed to throw strong doubt on the subject.

I have watched the growth of a mulberry tree for nine years. In 1878 it was apparently killed by a fire—the bark, leaves and branches were completely destroyed and the trunk soon rotted. New bark commenced forming near the ground and gradually extended, and now the tree affords more shade than ever, all the old dead wood being covered with new wood; but there was not a sign of a leaf or stem for several years.

Many of your readers well know that highly organized sap will flow from the maple long before any leaves are seen, and do they believe this sugar was formed the previous season and hid itself beneath the surface? Yet we must so conclude if the organization takes place in the leaves. Besides the motion must be downwards instead of upwards.

Any one observing where the large leaves on a tree are, will find them at the highest point, where the evaporation of water is the greatest and where a large supply of organized matter is demanded

with a full supply of the mineral matter that must have come from the soil in solution and which is not the effect of brimstone acid.

The presence of these mineral matters can be explained by the fact that sugar is a solvent for many minerals: lime, magnesia, iron and potash—just such as are found in the ash of the leaves—and if originally formed in the leaves—which we deny—the sugar must have gone down and got a supply of mineral matter and gone up with the addition secured, as the water alone will not dissolve these minerals.

The new process of making water gas, by passing steam through hot coke or coal, shows the attractive power of carbon for oxygen, as it decomposes the water, forming carbonic acid, and the hydrogen is set free, and is then extensively used for illuminating and heating processes. The gas by the light of which I am now writing is made in this way, and most of if not all the modern gas works are being constructed to make gas from water. I mention this merely to remind the reader of the great affinity existing between carbon and oxygen; i. e., the great positiveness of carbon and the negativeness of oxygen, only equalled by calcium and oxygen.

A. P. SHARP.

Rock Hall, Md.

THE jug goes to the water until it breaks. That neglected cough may rack you until it breaks down the entire system and consumption is fastened onto you. A sure cure is found in Warner's Log Cabin Cough and Consumption Cure. Two sizes, \$1 and .50.

A ten cent box of shoe blacking will go further than a one-hundred-dollar diamond scarf pin toward making a fellow appear a gentleman.

#### FARMERS TAKE NOTICE.

They have ten votes to seven of all other occupations.

They have votes enough to carry any election.

They can effectually put an end to the extortions of railroads, which take one bushel of every two the farmer raises.

They can put ten farmers into Congress and their state legislature for every one now there.

They can make their own laws in all States.

They can secure the same payment per hour for hard work that is demanded by brain work.

They can have all the comforts and luxuries now enjoyed by the classes which prey upon them.

They can combine themselves into a compact body.

They can co-operate, they can stand by one another, and if they do so can rule the world; or.

They can continue to be the dull drudges they have been; the prey of every cunning politician, lawyer, speculator and sharper in the land.—*Exchange*.

#### GATHERED CRUMBS.

Swallows fly at a rate of 150 to 200 miles an hour.

Hard times do not trouble farmers who are out of debt.

Never worry over trouble. The trouble itself is misery enough.

Carrier pigeons have flown at the rate of 114 miles an hour for seven hours.

We do not know of any farm which will support a family without work or care.

ONE of the meanest things a farmer can do, without being called to account by law, is to keep one or more worthless snarling

dogs that annoy his neighbors; but such meanness is by no means uncommon.

Gentleness cannot be kicked into a cow.

Coal ashes are a helpful mulch for shrubs, but plants will not readily grow through the ashes.

It is true that the busiest man is often the happiest man, but he often doesn't have time to realize it.

Don't let the month pass without the summer's wood being prepared and piled in the woodshed for use.

Most people believe in "the greatest good to the greatest number;" and their greatest number is number one.

A city girl in the country, on first seeing a watermelon growing, exclaimed: "My! I always supposed watermelons grew in the water."

It is always best for a farmer to establish a reputation for selling a good article in order to get his full share of the profits on anything he has to sell.

Large profits do not depend upon large crops. One may grow an extraordinarily large crop, but the expense of so doing may balance the receipts.

Every trace of the Colorado beetle has been destroyed in Germany by the timely use of disinfectants and tilling of the fields in which they first appeared.

Shrewd farmers always hire their help for the season quite early, when they have their pick. The best workers are always taken first, and there is a great difference in hired men.

The statement is made that no less than six species of North American birds have become extinct during the last ten years, and it is claimed that English sparrows were the main cause.

Professor Arthur, who is keeping his eyes open for all dangerous fungi, has

found a new one on the cucumber which promises to become as destructive to that vegetable as the rot now is to the tomato.

The nature of rust and smut is not perfectly understood, and a careful investigation of these parasitic diseases of plants would be a most useful work for some well managed experiment station to engage in.

It is said that at a late butter exhibit made at a dairymen's meeting, the city "expert" who judged the samples, made eleven points difference on two lots which were made from the same milk, churned and worked in common, but put up in two different forms.

Nearly 2000 acres are devoted to celery culture in the vicinity of Kalamazoo, Mich. Eighteen hundred persons are engaged in its cultivation, and 3,500 get their living directly or indirectly from celery. During the season, which generally continues five months, from twenty to thirty and fifty tons are shipped daily.

Perhaps the best preparatory crop that can be grown on peaty land is potatoes. Sometimes the yield is enormous and the quality all that can be desired; no disease or insects or other parasites injure the tubers, unless the season happens to be a wet one, when the fatal rot is most apt to affect them, more or less destructively.

There is a large factory in Bridgeport, near Chicago, employing one hundred workers, in which waste animal blood is converted into buttons. From 8,000 to 10,000 gallons of fresh beef blood are used daily for this purpose. It is prepared in thin sheets [by evaporation and chemical processes, and afterwards worked up into various articles. Not only buttons, but tons of ear-rings, combs, belt clasps and trinkets are annually made in this manner from blood.



## POULTRY.

### ROOSTS FOR POULTRY.

The roosts for Poultry should be about four inches wide on top with the edges champered.

Roosts for the general run of poultry should be not more than two feet from the ground.

Steps should also be arranged at each end of the roosts for the poultry to go up and come down.

If more than one roost is in a poultry house they should all be on the same level. They should never rise one above another.

We have preferred to have our roosts rough, just as they came from the mill, 2 by 4 inch lumber.

If resting in cleats the poultry roosts can be removed readily whenever required for cleaning.

The best method of cleaning poultry roosts is to saturate them thoroughly with kerosene or coal oil.

Examine the poultry roosts often, and very particularly, for red patches on the under side; these are patches of vermin.

About eight inches below the roosts should be placed a board for night droppings.

If things are properly planned in the first place, everything can be done about the roosts with very little trouble.

---

### Have Method.

Regularity in feeding tells as well with poultry as with any other stock. The flocks that are fed at irregular hours are always in a state of expectancy. They run whenever any one comes near their pens, and are kept in an unnatural condition all

the time. No good can come from this want of method, and surely the flocks will not be as attentive to business. Feeding at regular hours the hens soon learn when to expect their rations, and will pay no particular attention to anyone visiting their pens between whiles. Hens are far more regular in their habits than we give them credit for being, and this regularity should not be broken in upon. Watch the flocks and note how certain ones will, day after day, go to the nest about such a time. This, and other seemingly insignificant things, are what tell the story when the balance is struck at the end of the year.

---

### SHOULD INCUBATORS BE USED ?

The only objection to incubators is that there is something to learn before the operator can be successful. He must know what the machine is, the same as he would a threshing machine, or any other implement, and he will then have less difficulty. We believe that incubators are now as much a necessity on large poultry farms as a reaper and binder is on a large wheat farm, and they can easily be made to pay for their cost in a short time. Recently a reader made a complaint that his incubator was a failure; but upon investigation we found that although he had hatched but 180 chicks from 600 eggs, the chicks sold in market for 50 cents each, realizing \$70 (40 having died). The expenses for eggs and food were less than \$20, and here, with a hatch of only 30 per cent, a clear profit over expenses (excepting the labor) of \$50 had been made, or nearly enough to pay one-half the cost of the incubator. It is estimated on all broiler farms, that a hatch



H. H. HEWITT.  
— BREEDER —  
WILKESBURG, PA.

J. W. H. H. H. H.  
PITTSBURGH, PA.



of 40 per cent from the gross number of eggs (fertile and unfertile), if made in January or February, will pay well. This is as well as the hens can do in the cold season, the difficulty being that the hens will not begin to sit unless so inclined, while the incubator is always under the control of the operator.

For the Maryland Farmer.

### RED CAPS.

A breed of domestic fowls, possessing the unexampled qualities of the Red Caps, and pushing into favoritism with such speed, has attracted the attention of many who never gave poultry a thought before, and is enlisting in the ranks of breeders for practical purposes numbers of individuals who will prove a credit to the profession.

This new and beautiful variety seems to be taking a firm hold on England and America. So strong are its claims for the "chicken of the million" that the most prominent fanciers of France, Belgium and other parts of Europe are taking up the breed. It is being exhibited at most of the leading shows of Europe in a class of its own. A Red Cap club is being formed in this country, in keeping with those of Europe. Our poultry shows are noticing the breed by placing it on the list of new breeds. It has come to stay. Why? Because it possesses more important qualities than any other breed. To properly realize the beauty of the breed, one must see it. Imagine on a green lawn, standing proud, stately, a cock weighing six to eight pounds, with large, bright-red rose comb, well spiked, dotted nicely with small points over the top; hackle red, striped with black; wattles and ear-lobes, red; breast black; saddle red, striped with black; wing-coverts red; tail black, med-

ium size, sickle feathers well developed; legs slate; body round, plump.

Again, imagine, beside this male bird, as if plucking the beautiful lustre from off its plumage, a hen, not the less beautiful, a rich chestnut color, each feather spangled with black, weighing five to six pounds; then, to cap it all, large, finely-shape rose comb, being extremely attractive, and from which the fowls derive their name, Red Caps. They are not sitters.

They are the best layers in existence, and, while they have this "par excellent" quality, they embrace other desirable qualities, such as fine flesh, compact, like the Game; therefore they are first-class table fowls. They dress up yellow, mature early, and for hardiness nothing equals them but the game. In my fifteen years' experience they are the brightest peeps from the time they leave the nest, and easiest raised, next to the Game. If you can carry in your "mind's eye" their bright colors, their proud, erect, commanding appearance, together with their useful qualities, you have the Red Caps. They have been admitted to the Standard and are now placed before the American people through the proper channel.

Just here I would state that all tendency to destroy the good qualities of this breed by endeavoring to breed on some "fancier's" pet mark in keeping with his pet idea I strenuously oppose. Several late breeds that I know have been injured especially in their laying qualities by breeding on little combs, large size, etc. You show me a hen with a nice, large comb, and I'll show you a good layer—just put a pin in here. Get your combs on Red Caps as large as you can, and I'll say, Amen.

Williamsburg, Va. H. H. HEWITT.

Subscribe to the MARYLAND FARMER, with a premium, only \$1.00 per year.



**Mr. Felch's cure for Gapes.**

Chickens cough when they have gapes. Feed them chopped onions sprinkled with sulphur. Blow sulphur down the throat—just a little—or inject kerosene oil into the nostrils that they may breathe the fumes of the same all night. Underlay the coop in which they brood at night with carbolated lime; the heat of the brood will cause the acid to be freed, the breathing of which will remove the cause. But first move the coop to clean, shaded quarters, where they may be as cool as possible. A chicken's heart beats 150 times a minute and it never perspires. Sometimes heat is a worse enemy to chickens than cold.

and most effective method of getting rid of the vermin is to add a quart of kerosene oil to three gallons of strong soap-suds and sprinkle the mixture wherever it can be applied. If forced into the cracks and crevices with a hand force-pump it would be all the better.

Two important things should be remembered when building a poultry-house. The roof should be water-tight and the floor should be high enough from the ground to keep dry the year round. The structure must be warm and ventilated.

WHEAT ground in a coffee-mill makes excellent food for very young chicks. They can eat whole wheat after having become two weeks old.

The little red mites will infest the hen house in countless numbers on the approach of warmer weather. The cheapest

HENS may be a little backward on the egg question; but they never fail to come to the scratch where flower beds are concerned.

## LIVE-STOCK

**NETHERLAND PRINCE.**

Owned by SMITHS, POWELL & LAMB.

As so much interest is now manifested by dairymen in the butter qualities of Holstein-Friesians, a brief mention of the records made by a few of the get of Netherland Prince, owned by Smiths, Powell & Lamb of Syracuse, N. Y., will doubtless be of interest. It should be remembered that the daughters of this bull are very young, and all tests have been made at 2 and 3 years old. Netherland Princess 4th, 28 months old, 21 lbs. 10 3-4 ozs. butter in a week, a pound from 13.22 lbs. of milk. Aaggie's 2d daughter, 25 months old, 15 lbs. 1 oz. in a week, a pound from 15.44 lbs. of milk. Clo-

thilde 4th, 3 years old, 23 lbs. 10 1-4 ozs. in a week, a pound from 18.44 lbs. of milk. Clothilde 5th, 3 years old, 21 lbs. 10 ozs. in a week, a pound from 16 1-5 lbs. of milk. The butter qualities that have been transmitted in such a marked degree by Netherland Prince to his daughters are by no means accidental, but are the result of breeding from a long line of ancestors which possessed the same qualities. Netherland Prince's dam, Lady Netherland, two daughters and seven granddaughters, average, for the whole ten head, 18 lbs. 15 6-10 ozs. of butter in a week. Sixteen Netherland cows, including one two-year-old and one three-year-old, averaged 20 lbs. 1 13-16 ozs. in a week,







18.82 lbs. of milk being the amount required to make a pound of butter. Smiths, Powell & Lamb report that the call for highly bred butter bulls is greater than they have ever been. The signs of the times denote a bright future for the Holstein-Friesian breed of cattle.

### THE MULE.

The Mule certainly is not akin to religion; yet the ones who condemn the mule, like those who condemn religion, are the people who have had no experience with it, or have not given it a fair trial. Very rarely is the mule given a fair trial. From his birth he is maltreated because of a reputation not founded on any natural traits of his, but on misapprehension of his character. Let the mule be treated as is the horse and he is more docile and trustworthy than the horse. To this I can testify from personal knowledge. The best and most agreeable team I ever handled was a span of mules. They had been raised right and trained right. They never kicked at me; and I could drop the lines and leave them safely for an hour. Unless the mule's temper has been soured by abuse he will not kick so readily as the horse, because he is not so easily alarmed; and for the same reason a mule that has been properly handled is less liable to run away. The mule is not near so apt to be sick as the horse; will eat without question inferior food; will endure hardships better, being less nervous, and wastes less of its strength; eats less than the horse and will do more work. In short is much more economical and even more agreeable to handle when you know how to handle it. And the way to handle a mule is the way to handle a horse—by kindness and intelligence and firmness.

The mule is longer lived than the horse. I have handled a span of mules that when

thirty-five years old did as much work as any team. They had been kept hard at work ever since they were two years old.

As for the longevity of the mule, who has not heard that "the mule never dies?" The mule lives longer because it frets less, being less nervous, because its breeding, and conditions for many centuries have made it less subject to disease. It does not therefore break down as soon as the horse, its hoofs are tougher, so is its hide—the flies have a poorer show on it.

The Southern planters found the mule just the animal for hardships, lack of care, abuse, and for ignorant and careless drivers. The negroes were both ignorant and careless. There is no need to argue whose fault it was, the fact is certain; and for decades the mule was in the hands of men incompetent and known to be incompetent to handle horses. The negro roundly abused the mule. More than this the negro likes fun, and naturally in his then condition fun to him was often the torment of some animal; the mule from the time it first stood upon its feet was tormented.

Now the mule, though patient and docile as few animals are, under good treatment, has a wonderful memory for ill usage and a passion for revenge. Like all other animals, just as it is capable of appreciation of good treatment and of return therefor, so is it capable of appreciation of bad treatment and of return therefore; and subjected to the torment for fun humor of the darkey, and his disposition to be lordly over what he could, it is not strange that the animal did many scandalous things that gave him a bad reputation extending throughout the South and into the North.

Luckily matters have been radically changed, and under decent conditions the mule is rapidly obliterating the prejudice against himself.

The mule is justly reputed to be stubborn. Stubbornness is simply will power



diverted to wrong uses. This diversion is due usually to some fault of man, not of the mule. So long as will power is kept in proper channels, the more the animal has the better. Whenever the greater will power of the mule is kept in proper channels, by training and treating the mule properly, the mule is stubborn only in this, that it insists in wriggling the wagon out of the mud hole, that it insists in keeping the reaper rattling though the sun is low, that it won't get sick or refuse coarse fare.

The mule may be put to work—commonly is—when two years old. Up to this age it has cost less than the horse, and from two years of age will pay for its keep. But it is a common mistake to put the mule at hard work as soon as it is trained. Its work until it is three years old should be light, pulling light loads or doing easy plowing. Stunting does not pay in mule breeding any more than it does in horse breeding.—*J. M. Stahl, in Am. Rural Home.*

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THE Farmer who wants to make butter and do well at it must make a good article—the best in the market.

PROF. ARNOLD has said: "The sooner the minds of dairymen are disabused of the idea that the ripening of cream and the development of high flavor of butter lies only in the souring of the cream the better will it be for their reputation, and their pockets, and also for the consumers."

"IN reality there are but two questions for the dairyman," says an exchange. "They are: How can I make the best butter; for it is the quality that fixes the price? The second is: How can I reduce the cost of making a pound of butter to the lowest point; for it is the cost of production that fixes the ratio of profit."

#### TO TELL THE AGE OF HORSES.

To tell the age of any horse,  
Inspect the lower jaw, of course;  
The six front teeth the tale will tell,  
And every doubt and fear dispel.

Two middle "nippers" you behold  
Before the colt is two weeks old;  
Before eight weeks two more will come;  
Eight months the "corners" cut the gum.

The outside grooves will disappear  
From middle two in just one year;  
In two years, from the second pair;  
In three the corners, too, are bare.

At two the middle "nippers" drop.  
At three the second pair can't stop;  
When four years old the third pair goes,  
At five a full new set he show.

The deep black spots will pass from view  
At six years from the middle two;  
The second pair at seven years;  
At eight the spot each "corner" clears.

From middle "nippers" upper jaw  
At nine the black spots will withdraw;  
The second pair at ten are white;  
Eleven finds the "corners" light.

As time goes on, the horsemen know,  
The oval teeth three sided grow;  
They longer get, project before  
Till twenty, when we know no more.

---

MISS MIDDIE MORGON, the market reporter of the *New York Times*, is a remarkable judge of animals. Years ago the king of Italy sent her up into the mountains to choose horses for him, and was so pleased with those she picked out that he gave her a decoration. She is consulted by the greatest horse fanciers in America, and her daily notes are the record of the live stock market for the country at large.

THE demand for good butter more than keeps pace with the country's growth. There is a good prospect for the dairyman of the future, who furnishes the quality of goods the market demands.

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 AND  
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**SECURE THEM.**

Warren, N. H., Apr. 13th, '88.

Gents:—I received the copy of FARMER  
 "O. K." and see that you published the  
 little article on Wyandottes and used the  
 cut again. "Thanks," and for your  
 kindness in giving me so good an ad.  
 I will donate three sittings of my Silver  
 Wyandotte Eggs for your benefit in this  
 way.

"To each of the three first persons  
 sending the names of three new sub-  
 scribers to the MARYLAND FARMER, paid  
 for one year, I will send 1 sitting of my  
 Silver Wyandotte Eggs packed and  
 delivered at the express office" free of  
 charge.

Thanking you for kindness in the past,  
 I am very truly yours,

F. C. GLEASON,

It is very seldom our readers will have  
 such an opportunity as this offered them  
 to secure high class stock at the expense  
 of a little labor. Act promptly. Send in  
 the names. Silver Wyandotte eggs should  
 not go begging, for they are a prize well  
 worth having.

**Maryland Agricultural College.**

The choice of Trustees at the meeting of  
 Stockholders April 11th, resulted in giving  
 us some good men and farmers on this side  
 of the house: J. Carroll Walsh, Harford  
 County; Wilmot Johnson, Baltimore  
 County; Allen Dodge, Washington County;  
 Chas. B. Calvert, Prince George's County;  
 Robert A. Dobbin, Howard County.  
 When the Governor shall have appointed  
 the Trustees for the State, we hope we  
 shall see a body of practical farmers in  
 charge such as has never before been the  
 case since its organization. The prospect  
 of making the College a genuine agricul-  
 tural institution is now better than ever



before and we say to farmers everywhere, Speak a good word in its behalf.

Let us not, however, expect too much from it during this first year. It is, so far as agricultural prospects are concerned, in a wretched condition. Plenty of good soil of almost every variety; but crying aloud in its need of skillful feeding and treatment. This year the most anyone can expect is to bring it into the line of respectability and prepare it for success hereafter. If anyone can do this, we are confident President Alvord is the one to succeed.

The Experiment Station is a very important factor in connexion with the college farm, and virtually frees the college from all obligations of experimenting on its own home acres. A strict account should be kept with the farm produce, so that the success of this department could be demonstrated to each student in the college courses.

We would greatly like to have the students graduate from our college with a sincere love for farming and farm life, and ready to take in hand any farm in our land and make of it a decided success. Our country is now greatly in need of educated, practical young men to take full charge of the farms of wealthy owners, who stand ready to employ them at good salaries. But they must be perfectly conversant with every department of farm work, from the first stirring of the soil to the final disposition of the crops; and they must of all must understand the philosophy of plant feeding and plant nurture. The difference between an educated farmer and an ignorant one, is the attention given by the former to little things—and in this always lies the great surety of success.

We acknowledge that we expect much from the College; but we shall make great allowance for the present condition of things, and begin to expect real fruit in another year from now.

### SULPHUR IN TREES.

We learn of some cases where fruit trees have been greatly injured by boring holes in the trees and placing sulphur in the holes, intended as a remedy against insects. The trial has demonstrated the fact that the sap will carry the sulphur through the tree; but it ruins the tree. This is only another evidence that the flavor of fruit and the health of vegetable life depends very largely upon the food given to it. It is also an evidence that the germs of disease can be conveyed from one province to another in the vegetables used as food, which have not been carefully supplied with innocuous fertilizers. But we advise our readers to be very careful about placing in the sap of trees anything which may prove an injury; for an apple or pear orchard cannot be renewed as readily as a field of wheat or corn, and when once ruined it is a life work to restore it. Let our Experiment Stations bear the expense and burden of such trials, and then if the failure comes it will go where it belongs—to the profit and loss account. It is expected that trials at the Experiment Stations will spend money merely for the experience obtained and not with any prospect of cash returns, unless remarkable success should attend the experience. Keep this boring of holes in trees carefully away from your farm practice, until the Experiment Stations report something trustworthy on the subject.

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### The Maryland Horticultural Society.

This Society studiously ignores the press, withholding the usual compliments which such societies are generally glad to bestow. No wonder it does not thrive any better, and that complaints come of lack of appreciative patronage. The officers in charge should learn to extend the common



courtesies, or others should be appointed. No one wishes to patronize a body which is so far behind the age that it cannot recognize the ordinary civilities of the times.

### INSECTICIDES.

The season for the application of insecticides is approaching, and while Paris Green, London Purple, or any other preparation of Arsenic, is effectual, we are decidedly opposed to its use. This opposition is because it is dangerous. Throw around it every precaution possible and still it is a constant danger from the moment of its purchase till years after its use. If an orchard is sprayed with it, the workmen and the horses are in danger and must be carefully kept to the windward of the trees, while the moisture left upon the wagon is also a danger for the future. Then the drippings upon the ground, are a danger for the child, for the cattle, for the swine, for the chickens and for the birds, more or less frequenting the orchard after the spraying has been practiced. If the fruit is a little advanced, so that the poison reaches the indenture of the stem, it is a danger going into the farmer's home, and perhaps into the homes of hundreds in all parts of city and country. The least carelessness in its application adds fearfully to the danger, and we all know how carelessly these things get to be handled after a little common use even by the best of workmen.

There is an article just as effective, or even more so, which is perfectly harmless so far as animal life is concerned, and although it costs a trifle more in the beginning it will be a vast saving in the final summing up. Pyrethrum is the greatest insecticide yet discovered, and is harmless to everything of a higher grade than insects. Do not run the risk of

poison to man and beast when there is no necessity for it.

The cost of Arsenic for a tree is from 3 to 5 cents, of Pyrethrum from 5 to 7 cents; but the satisfaction is worth dollars to know that the birds in your orchard and all your stock are safe.

### DEATH OF A. S. ABELL.

Perhaps no man in the City of Baltimore has had a wider influence than Mr. Abell, whose death occurred on the morning of April 19. His establishment of *The Sun* more than 51 years ago, and its successful management up to the present, has made his a household name in the families of Baltimore. The careful conduct of such a newspaper for so many years has been a grand work for the good morals and the prosperity of the city. It has always been a newspaper which could go into any family without danger of the sickening details of crime which so often serve to vitiate the young. It has ranked among the cleanest and best of the daily newspapers of our land. Mr. Abell will be long remembered for the good he has done for this city and this land. May *The Sun* continue to be the blessing which he so steadily insisted upon making it in the past.

### GOOD ROADS.

No subject is more important in Maryland to-day than that of the roads. The State can never become a prosperous, growing agricultural State until more and especial attention is given to making the public roads decent thoroughfares. The roads should be of such a character that no turnpike company could possibly exist in competition with them. As it is now, the roads seem to be built just to show that we must have and must support these

companies. No State in the Union has better facilities for making permanent roads to last through successive generations with little or no repairs and no State is better situated to make such roads both a duty and a conspicuous recommendation. The State is but the outlying district surrounding the national Capital and the great city of Baltimore. Roads should be solid rock structures, smooth as a floor, wide and attractive, with suitable accessories as to beauty, and as free as the light or the air. Such roads we can have; and they will not cost more than will be spent filling up mudholes during the next 50 years in the miserable apologies for roads under present laws.

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#### "HE IS ON TOP."

How do you know that farmer is successful?

You don't see any odds and ends lying about as litter in his dooryard.

You see his fencing all along the road is in good order and everything clean and neat in front of his premises.

None of his implements are lying exposed in the fields.

The door yard is trim and properly cared for, inviting your inspection.

The vegetable garden is well furnished to supply the family wants from early spring to autumn.

The small fruits show themselves in moderate sized plantations for home use, and in the fields for market.

Flowers and Shade trees surround the home and are evidently a source of pleasure and pride.

The House is painted, and all its surroundings made comfortable and attractive.

Barnyard fences, gates, and the barns themselves show a substantiality which cannot be mistaken.

The cows are as slick as other farmers'

horses, and the horses are contented and happy and full of life and frolic.

In the house is comfort and a degree of refinement shown in the furniture, in the books, in the magazines and papers, in that indefinable air which shows intelligence, cultivation and general content belonging to success.

We smiled when we heard the words, "He is on top;" but who does not recognize the fact?

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#### SMALL FRUITS.

The season has been backward and dealers in nursery stock and small fruit plants are still able to supply anything needed in a condition so that it will not suffer if judiciously managed after it is set out now. It is not therefore too late to arrange for the planting of small fruits, and we urge upon those who are not contented with the experience of the past on their farm crops, to begin the work of a radical change by planting at least a small trial plot of those fruits most likely to be sought in market. If it be not more than an acre—divide it up between strawberries, blackberries, raspberries, gooseberries and currants; cultivate it thoroughly; give it a reasonable portion of fertilizer; keep it free from grass and weeds; and when last worked for the season, mulch it well with manure. This will be a beginning and we are sure you will not regret it in time to come.

A part of this acre may be used during this first year for a root crop between the rows of blackberry and raspberry bushes; and if needed even between the rows of currant and gooseberry bushes some small plants might be raised. We do not however recommend this last. If properly cared for, the acre will pay for the labor next year, and thereafter it will be a source of income continuously.



## THE TARIFF.

We give place to the following communication on this subject, as it seems to occupy at present a very large share of the public attention, and to be of special interest to all parties. The letter while full of a just idea has brought a smile to us occasionally by its radical character:

Mr. Editor.—Allow me to give a few of my views on the subject which seems about to become the principal theme in the political world, and which is now very prominent in the doings of Congress—I mean the Tariff. Of course a tariff means a tax on the people and the people are now being taxed at the rate of some hundred of millions of dollars more than the government requires for its support. This is all wrong. It would be proper to have a tariff for the support of government; but when it goes beyond that it is unnecessarily oppressive.

Now, who is it that is paying this tariff tax? It is every one who uses anything on which the tariff is collected. When a person buys a thing, he has to pay, in addition to what it would otherwise cost him, this tariff tax, and this extra goes to the general government to trouble our Congressmen and invite the extravagant appropriations which have become the great fault of our country. So everyone is paying this tariff tax, and helping pile up the unnecessary millions for someone to squander upon useless things. But no one pays more of this tax than do the farmers; for the farmers have to use the most of every article upon which the tariff is most heavily laid.

The manufacturers have a great influence in our country and they have had heavy tariff laid upon everything which would interfere with their productions. I think they have had this long enough, and it is time that something else should be protected and the tariff changed so as

to favor more our class—I mean the farmers. If the farmers can be protected in any way, let it be taken off from other things and placed upon those things to the farmer's benefit. It can be taken off from all which farmers have to buy; and then, if that is too much, it can be placed on such things as the farmers produce, until the scales come somewhat even, for the oppression farmers are suffering now and have suffered in the past. Everything a manufacturer uses, and whatever he makes, are protected now by a tariff, and farmers have to pay for it. Let the boot be placed on the other foot a little while; let the farmer be protected, the tax taken away from everything he has to buy and added to everything he has to sell, and let him have a taste of the prosperity which has heretofore made the others to swell their gains and live in such fine houses, and spend money so freely for every luxury. These are my opinions, anyhow.

J. L. T.

## COMMERCIAL FERTILIZERS.

While we are anxious that farmers may be able as rapidly as possible to bring their land into condition where they may be able to make on their farms as large an amount of fertilizing material as possible, we cannot conceal the fact that it will be long before the necessity for liberal purchases of commercial fertilizers can be profitably dispensed with. The following will be particularly interesting in this connection. It appears that the Connecticut Experiment Station suggested to two prominent and practical farmers to experiment (Mr. Bartholomew and Mr. Fairchild) and what follows is the reply by each to the question, "What actual benefit to you as a farmer have been your trials of these fertilizers?"

Mr. Bartholomew said—"I have learned



to place great confidence in commercial fertilizers, when properly used, as furnishing the most reliable and economical materials for increasing my crops.

"I have learned that the effects of the different substances used, although varying much from each other, are nearly identical in different fields and in different years on my farm, always showing a tendency to the same characteristics.

"I have learned that these fertilizers are much superior in quality to those we obtained before the establishment of the Experiment Station.

"I have learned that this farm, which my father, after fifty years of acquaintance and cultivation, pronounced ill adapted to the raising of corn, gives me, under similar treatment, with the use of phosphate of lime in addition, in corn, one of my most profitable crops.

"I think I have learned that by the proper use of commercial fertilizers as indicated in the different trials, I can obtain, at fair profit, finer potatoes, free from disease and blemish, than by any other means known to me.

"I have learned that by the use of one or more of these substances as adjuncts to farm manures, I can obtain at small expense superior crops of corn, oats and potatoes, with less manure, while the remainder of the manure applied as top-dressing to grass lands has materially increased my crops of hay.

"And finally, to include the whole matter, I find that I am keeping more stock, getting better crops and better satisfaction from my farm than before."

Mr. Fairchild, in reply to a request to state some of the ways in which his experiments had been of practical utility to him, said—"I think they have helped me and will help me in many ways.

"1. They show what fertilizing materials my crops must have.

"2. They show me in what quantities in

what forms and in what ways I should apply different fertilizers.

"3. They save me money by enabling me to buy what I want, without using a large quantity of material that I do not want.

"4. I think I shall thus be enabled to raise all kinds of crops on very poor land with profit."

He also said: "Under the old system of farming it is no wonder the boys leave the farm. You can't blame them. I did so myself, came back, tried again, and should have given up once more if it had not been for these experiments and what I have learned in connection with them. As it is, I find myself giving up outside work, devoting myself more and more exclusively to my farm, supplementing the labor of my hands with the labor of my brains, and I feel the benefit in my purse, in my home and in my mind.

---

THE sugar trust, which controls all of the refineries, has lately ordered four large refining establishments closed, in order to lessen the amount of sugar in the market, for the purpose of advancing the price. The trust pays these establishments for lying idle, but the consumer has to pay the advance.

THE number of hogs packed in the West during the Winter season is estimated by the Cincinnati Price Current at 5,900,000, a decrease from last year of about 539,000 head. The prospective hog supply points to a decrease of thirteen per cent.

To PROMISE, and to keep your word are two different things. We promise that Warner's Log Cabin Liver Pills afford a pleasant and immediate relief. Try them and see if the promise is not kept. Price 25 cents a bottle.

See premium of MARYLAND FARMER, of Wyandotte Eggs, on page 148.

## THE HOUSEHOLD.

### GOLDEN KEYS.

A bunch of golden keys is mine,  
To make each day with gladness shine.

"Good Morning!" that's the golden key,  
That unlocks every day for me.

When evening comes, "Good Night!" I say  
And close the door of each glad day.

When at the table, "If you please,"  
I take from off my bunch of keys.

When friends give anything to me,  
I'll use the little "Thank you!" key.

"Excuse me," "Beg your pardon," too,  
When by mistake some harm I do.

Or if unkindly harm I've given,  
With "Forgive me" key I'll be forgiven.

On a golden ring these keys I'll bind,  
This is its motto: "Be ye kind."

I'll often use each golden key,  
And so a happy child I'll be.—*Scattered Seeds.*

### THE BAXTER STREET LOVER.

[S. B. in New York News.]

"You'd better marry him, my dear," said old Mrs. Fielder.

Mrs. Fielder was darning stockings by the light of a kerosene lamp. Fanny, her plump, blue eyed niece, was ripping up an old silk dress, to try and modernize it after a paper pattern, borrowed from Squire Stapleton's young wife.

"A great deal better," went on the old lady, threading her needle with half a yard of blue-mixed stocking yarn. "He's got a good property of his own, and he's been a dutiful son to his mother, till the old lady was buried in Chestleton churchyard. A good son makes a good husband, and—I

don't believe you'll ever do better than Hiram Archer."

"There's lots of others in the world," said Fanny, tossing her head.

"Yes, but they don't come in your way," sagely responded the old lady.

"That's just it," said Fanny, letting her work drop in her lap. "If I only had a chance! I'm not so bad-looking, Aunt Zeruiah, and I don't see why I shouldn't be able to strike out a better destiny for myself than to be Hiram Archer's wife, and spend my days in churning butter and raising poultry. And Mrs. Stapleton is going to Long Branch—and she has promised to take me with her if only you'll consent."

Old Mrs. Fielder opened her eyes wide behind the round, silver-bound glasses of her spectacles.

"And where do you s'pose the money's to come from?" demanded she.

"There's the hundred dollars Uncle Jared left me."

"But that was for your wedding outfit when—"

"Oh, but I'd a great deal rather use it now, Aunt Zeruiah! Please, please let me have it! I may never have such another opportunity."

"And what will Hiram say?" gravely demanded the old lady.

Fanny tossed her auburn ringlets.

"He isn't my master yet," said she, rather defiantly. "And he may never be! Oh, Aunt Zeruiah, I do believe it would kill me to be shut down for life in this horrid, gull country place, like a chicken in a coop."

Aunt Zeruiah looked keenly at her "Is

that the way you feel about your old home, Fanny?"

"I can't help it, aunty."

"Well, perhaps you can't. Yet if you are so set upon it you may go and leave the old landmarks behind you," soberly spoke Mrs. Fielder.

"Yes, but I shall come back again, aunt," cried Fanny, a little startled by the peculiar tone of her aunt's voice.

"Maybe, but you'll never be the same Fanny again."

The lilac bushes brushed sepulchrally against the window panes—an owl hooted in the distant woods, and Fanny involuntarily shuddered. Were Aunt Fielder's words a prophecy?

But the next week she started for Long Branch, with her old silk made up and re-trimmed and a new white dress in her trunk, under the chaperonage of Squire Stapleton's pretty young wife, who had been a New York girl before she came down to live in Clover Hollow.

Long Branch was very gay, and Mrs. Stapleton met a circle of dashing Southern friends there—and before the week's end Fanny Fielder imagined herself in Paradise.

"I do really believe, Fanny," said Mrs. Stapleton, fanning herself as she sat on the veranda in view of the ocean, "you've made a conquest!"

And Fanny herself believed it also.

Don Emilio Serey was a dark-eyed, swarthy-complexioned young man, rather below than above the average height, who wore diamond studs so large as to inspire doubt as to the genuineness of their water in the minds of good judges, and a stiff waxed moustache, after the style of Napoleon III. He drove a fast horse, generally wore a miniature bouquet in his button hole and spoke with a drawling accent, which was music in the ears of susceptible young ladies.

"He is from St. Domingo," said Fanny

confidentially, to Miss Stapleton. "And he owns fourteen hundred acres of sugar plantations and orange orchards there. But the climate doesn't agree with him in summer time."

"My!" said Mrs. Stapleton. "And he really loves you?"

"He says he shall commit suicide if I don't marry him," confessed Fanny, smiling and blushing.

"Fan, you're the luckiest girl I ever heard of," said Mrs. Stapleton. And I suppose you'll be married at Grace Church and have your diamonds on exhibition at Tiffany's and it'll be in all the papers. Dear, dear, how charming it will be!"

That day's post brought a letter from Aunt Zeruiah Fielder, Hiram Archer had just completed the bargain for the old Linsley farm and wanted to be married at once, if Fanny had no objection. And would she stop on her way back in New York and bring a good fall overcoat for old Mr. Hopgood, whose rheumatism kept him at home—money, measure, etc., inclosed.

"What nonsense!" said Mrs. Stapleton. "Of course you won't consent to marry this country bumpkin after—"

"But I shall have to go home and tell them about it," said Fanny, not without a gleam of conscious triumph in both eyes and voice. "And perhaps I had better get the matter settled now while Emilio—isn't it a sweet, liquid name?—is gone to New York to get the engagement ring. I will be back tomorrow evening."

"Hadn't I better go with you?" suggested Mrs. Stapleton. "I've a little shopping to do, and then I can see you off in the train afterward."

So Fanny and Mrs. Stapleton went to New York together, and all the way they talked of Emilio.

"Where are you going to buy your over-



coat?" asked Mrs. Stapleton. "On Broadway, of course?"

"No," answered Fanny, blushing, and a little embarrassed. "Mr. Hopgood inclosed the address of a firm on Baxter street, where he buys all his things."

"Baxter street!" echoed Mrs. Stapleton.

"Yes."

Mrs. Stapleton shrugged her shoulders.

"Well, I suppose we must go there, then. But, for pity's sake, let's have it over as soon as possible!"

The proprietor of the Baxter street establishment bowed them politely into his store.

"Overcoats, ladies? Yes, certainly! Here, Solomon! What are you hanging back for? Forward! Show the fall overcoats to those ladies, and look lively about it!"

Thus peremptorily adjured, the reluctant clerk came forward—and to their surprise the two ladies were confronted, face to face, with Don Emilio Serey, the owner of nobody knew how many acres of productive St. Domingo property! Fanny Fielder recoiled—Mrs. Stapleton uttered a little shriek while the discomfited salesman, beckoning to a fellow-clerk to take his place, retreated as rapidly as possible, muttering something about "business of importance."

Fannie bought the overcoat—whether it was green, gray or scarlet she didn't know nor care, and, to tell the truth, old Mr. Hopgood found serious fault with the quality of it afterward—and then she turned to the proprietor.

"Who is that man, sir?" she questioned, "The one you called Solomon? I ask because I met him at Long Branch a few days ago under the name of Don Emilio Serey!"

The proprietor burst out laughing.

"So that's his latest dodge, is it?" said he. "He's Don Emilio just about as much

as I'm the Prince of Wales! He had his vacation last week, and he came home boasting about being engaged to an heiress. And altogether he was that topping and careless as I've given him a month's warning to look out for a new situation. 'Tain't everywhere he'll get the wages I pay him—\$25 a month and found."

Fanny glanced at Mrs. Stapleton, Mrs. Stapleton glanced back at Fanny.

"Perhaps if we're to catch the 4 o'clock train we'd better go," said the latter.

Neither of them spoke a word until they were nearly at the depot. And then Mrs. Stapleton murmured faintly:

"Dear Fanny, what an escape you have had!"

"Horrid impostor!" cried Fanny, with a face the color of a crimson poppy.

Hiram Archer met her at the station and was surprised at the earnestness with which she ran into his arms.

"Oh, Hiram, I'm so glad to be at Clover Hollow again!" she cried out, almost in tears. "I never want to see that odious Long Branch again! I am so glad to get back to you and Aunt Zeruiah."

They were married and settled down on the Lindsley farm within a month.

And Aunt Zeruiah marvelled exceedingly that the visit to Long Branch had produced so different an effect from what she had anticipated on her niece Fanny.

THE *Scientific American* says that copal varnish applied to soles of shoes and repeated as it dries until the pores are filled and the surface shines like polished mahogany, will make the soles waterproof, and last as long as the uppers.

POSTPONED is not done away with. If you desire your sufferings done away with, do not postpone using Warner's Log Cabin Extract for internal or external pain. Two sizes, price \$1 and 50 cents.

For the Maryland Farmer.

### QUILL LACE.

Cast on 26 stitches, knit two rows plain. purl 22, reverse needles, knit one, throw, and narrow 10 times, knit one, plain 22, reverse needles, plain 22. purl 22, plain 4. (First quill.)

Under quill.—Plain 4, purl 22, plain 22, reverse needles, purl 22, plain 26.

### PATTERN OF LACE No. 2.

Cast on 19 stitches, knit one row plain.

1st row.—Knit 2, narrow, throw 2, narrow, knit 1, narrow, throw 2, narrow, knit 1, throw 1, narrow, knit 2, throw 1, narrow, knit 1.

2.—Plain 10, purl 1, plain 4, purl 1, plain 3.

3.—Plain 10, narrow, throw, knit 2, narrow, throw, knit 3.

4.—Widen and plain. In widening throw the thread over the needle before knitting the first stitch as that forms the loop.

5.—Knit 2, narrow, throw 2, narrow, narrow, throw 2, narrow, knit 1, throw, knit 2. narrow, throw, knit 5.

6.—Widen, plain 13, purl 1, plain 3, purl 1, plain 3.

7.—Knit 9, narrow, throw, knit 2, narrow, throw, knit 7.

8.—Widen and plain.

9.—Plain 2, narrow, throw 2, narrow, knit 2, narrow, throw, knit 2, narrow, throw, knit 9.

10.—Plain 19, purl 1, plain 3.

11.—Plain 7, narrow, throw, knit 2, narrow, throw, knit 1, narrow, knit 5, narrow.

12.—Plain.

13.—Plain 2, narrow, throw 2, narrow, narrow, throw, knit 2, narrow, throw, knit 1, throw, narrow, throw, narrow, knit 3, narrow.

14.—Plain 17, purl 1, plain 3.

15.—Plain 7, throw, knit 2, narrow,

throw, knit 1, throw, narrow, throw, narrow, throw, narrow, knit 1, narrow.

16.—Plain.

17.—Plain 2, narrow, throw 2, slip and bind, throw, knit 2, narrow, throw, knit 1, throw, narrow, knit 2, throw, narrow, throw, narrow, knit 1.

18.—Plain 17, purl 1, plain 3.

19.—Plain 6, throw, narrow, knit 1, narrow, throw, narrow, throw, slip and bind, throw, narrow, throw, knit 3.

20.—Widen and plain.

21.—Plain 2, narrow, throw 2, slip and bind, throw, narrow, knit 2, throw, narrow, throw, slip and bind, throw, knit 5.

22.—Widen, plain 17, purl 1, plain 3.

23.—Plain 7, throw, narrow, knit 2, throw, slip and bind, throw, knit 7.

24.—Widen and plain.

25.—Plain 2, narrow, throw 2, narrow, knit 2, throw, narrow, knit 2, throw, narrow, knit 8.

26.—Plain 18, pearl 1, plain 3.

27.—Plain 9, throw, narrow, knit 2, throw, narrow, knit 5, narrow.

28.—Plain.

29.—Plain 2, narrow, throw 2, narrow, narrow, throw 2, narrow, throw, narrow, knit 2, throw, narrow, knit 3, narrow.

30.—Plain 12, purl 1, plain 3, purl 1, plain 3.

31.—Plain 11, throw, narrow, knit 2, throw, narrow, knit 1, narrow.

32.—Plain.

In slipping and binding, I sometimes knit 3 stitches together, it answers as well as the regular way.

Either steel needles, or bone lace needles are used.

MAY MASSEY.

Philadelphia.

“REGULATE the Regulator.” Do you want good health? Blood tells. Warner’s Log Cabin Sarsaparilla will regulate the blood. Best and cheapest. 120 doses for \$1.00.

## RECIPES.

## HAM BALLS.

Two cups of chopped ham.  
 Three hard boiled eggs chopped.  
 Two rolled soda-crackers.  
 One teaspoonful of made mustard.  
 Make into balls, bind with egg, roll in flour and fry.

\* \*

## BAKED SHAD.

Clean carefully.

The stuffing should be of bread crumbs, a little finely chopped pork, a little onion, summer savory and parsley and the usual seasoning.

Fill the fish with this and sew it up.

Put in a hot pan a slice of fat pork, lay in the fish and bake an hour, basting occasionally with its own juices.

\* \*

## CLAMS.

Take the liquor from 50 clams.

Mix with one cupful of rolled cracker, half a cup of milk, two eggs, a table-spoonful of melted butter, half a table-spoonful of salt, a little mace and cayenne pepper.

Beat into this mixture the chopped clams.

Fill the shells and bake in a hot oven to a light brown.

Serve in the shells.

Place a slice of lemon on each plate.

\* \*

A pail or tub of fresh cold water, renewed several times in the course of twenty-four hours, will absorb all the evil odor of fresh paint in a day or two. The taste of the water after an hour will prove the thoroughness of its work.

Subscribe to the MARYLAND FARMER, with a premium, only \$1.00 per year.

## D. G. Adelsberger—Water Works.

Remarkable success has attended this firm in some of the most extensive works in the country—partly on account of the moderate charges and partly on account of the superior workmanship. Among the many evidences of thorough workmanship may be mentioned the large Water Works on Long Island, N. Y., on the Alleghany River, Va., and the very extensive sanitary plumbing work in the McShane Brass and Bell Foundries on North St., Baltimore. These will well repay examination. Large works, also, for the U. S. cattle quarantine, for A. S. Abell, of this city, St. Patricks School building on Broadway, the Baltimore City Marine Hospital, the Bayview Asylum, for Jos. R. Freeman of Washington, D. C., and for J. Loeber on Catonsville Road. See the advertisement.

## IMPORTANT.

The day is gone by when it is needful to teach the farmer the necessity of fertilizing his wasted and impoverished soil, but the lesson has not yet been fully learned or appreciated by all, that it is to the bone fertilizer the earth owes all her richness and fertility. This important question comes again and again to the front and cannot be too often impressed upon the farmer's mind. In paying the debt to Mother Earth which every farmer owes, the best form of payment is the cheapest. That which enriches the soil and produces at the same time a more adequate return for the expenditure must certainly be the best for his interest, and it is only necessary to study for a moment the operations of the simple rule of all growth to realize the obvious truth of the proposition. When nature fertilizes the soil she uses the natural form of bone and flesh decomposition for its own renewal, but the fleshy parts in their decay form but a small



percentage of the supply, owing to their aqueous qualities, while in the bones there remains the solid and permanent supply of fertilizer, imparting all the necessary elements of growth and fecundity to the enriched soil. Thus it will be seen that growth comes from bone decay, and returning bounteously cotton, corn, vegetables, flowers and fruit, the inevitable result from fertilizing the soil with Lister's Pure Bone Fertilizer.

On the colored page facing the guide will be found the advertisement of Lister's Agricultural Chemical Works, of Newark, N. J., Mr. Dwight L. Roberts being Southern Manager. It will be seen that Lister's Fertilizers are made from animals' bones, and their advertisement shows a guarantee of this.

#### A Great Remedy

For coughs, colds, consumption, is Dr. A. B. Wilbor's Cod-liver Oil. Contrary to the usual impression, it is pleasant to take. Those who use it like it and find it contains wonderful healing qualities. Besides it will give flesh and strength to the wasted and broken down body. Remember always ask for Dr. A. B. Wilbor's Pure Cod-liver Oil. All druggists keep it. If you will address Dr. A. B. Wilbor, Chemist, Boston, Mass., he will promptly reply sending you free an illustrated circular.

THE Newark Machine Co., of Columbus, Ohio, have concluded not to dispose of their business to the Victor Machine Company as has been contemplated. Therefore, the Company have started up their factory with increased capital and are building their full line of Victor Manure Spreaders, etc., which they are prepared to furnish to the trade.

#### About the Sparrow.

Dr. Brodie, of Toronto, who has for several years past been taking notes on the food of the sparrows, has submitted the result of his observations to the Canadian Institute, an abstract from which appeared in a recent issue of the *Toronto Globe*. Dr. Brodie is an ardent lover of birds, and approaches the subject with an evident desire to spare the sparrows, if possible, or, at all events, to say the most that can be said in their favor.

The observations have been made with a great deal of care and are no doubt perfectly reliable. Several ladies and gentlemen of Toronto have assisted in this work, and from all of them came repeated notices of the birds having been observed destroying the buds of fruit and shade trees throughout the city.

They also get the credit of taking some insects. Thus from March 1st till Oct. 31st, 1885, the stomachs of 237 birds had been examined, and 104 or about 43 per cent, of them contained insects of several orders. Special mention is also made of their being observed killing grasshoppers. This seems to be an acquired taste which it is hoped may improve on cultivation. I have seen a sparrow capture and devour a grasshopper now and then, but it seemed to be but an individual taste; for where several sparrows and several grasshoppers were near each other, the engagement did not become general.

Dr. Brodie deserves credit for the time and attention he has devoted to this subject, which many who are more directly interested in it have failed to do. Its importance can hardly be over-estimated, and now that attention has been directed to it, let every gardener, farmer, and fruit grower keep a close watch on the movements of the birds, and satisfy himself whether or not they are injurious. For if they are so now, the injury will assume

gigantic proportions as the birds increase in numbers, and it may then be too late to cure or prevent it.—*Farmers' Advocate*.

#### Books, Catalogues, Reports, &c.

*Crawford's Spring Catalogue* of New Strawberries. Free to all. Matthew Crawford, Cuyahoga Falls, Ohio.

*Ogilvie's Popular Reading*, No. 41, gives the full five parts of The Rugg Documents containing "The Experiences of Aunt Jerusha Rugg, a lone and disconsolate Widow, in search of a husband." All for 30 cts.

*The Delineator*, with its wealth of fashion and patterns, is a delight in the family. It saves ten times its cost in the item of dressmaking. \$1.00 a year, Butterick Publishing Co., New York.

*Catalogue of Nursery Stock*, Wm. Corse & Son, Baltimore, Md. No one can go amiss in ordering this, who is desirous of planting. It is still time to secure good stock near home.

*Reports from the Consuls of U. S.* for the month of February 1888—covering a broad field and many subjects of Agricultural interest.

*Reports of the Maine State College of Agriculture*. While many improvements are going forward in other departments, the College farm has met with serious reverses so that the report for 1887 is not flattering in that one department; but 1888 may show a different condition.

U. S. Department of Agriculture, *Division of Chemistry*, Bulletin 17 on the Manufacture of Sugar.

*Peninsular Horticultural Society*, Organization and First Annual Meeting. A well gotten up pamphlet of nearly 100

pages. Send 13 cts. in stamps to Wesley Webb, Sec'y, Dover, Del., for a copy.

*Catalogue from Cumberland Valley Poultry Yards*, Carlisle, Pa. Joseph Bosler, Jr., Proprietor.

*Pomona Nurseries*, Wm. Parry, Parry, N. J. Spring Catalogue. Also, Garden Seeds.

*Special Issues* of the U. S. Consular Reports.

*Department of Agriculture*, Report 49, Statistician—March—Corn and Wheat.

*Leslie's Popular Monthly* contains its attractions and the *Sunday Magazine* is worth reading any day of the week.

The *Century* with the gradual development of Russia's Siberian policy is becoming interesting and divides the attention with the *Life of Lincoln*.

*Transactions of the Massachusetts Horticultural Society* for the year 1887—Part 1. The weekly discussions of this Society are an instructive and valuable portion of their work. Their weekly bulletins now issued will do a large amount of good. They are timely offerings to the people and should be appreciated at their full value.

*Harpers Monthly* for May comes with unusual freshness and spirit and commands a good reading. The Western Sketches of Charles Dudley Warner are particularly refreshing and readable. The illustrations are excellent.

HORTICULTURE is taught in the common schools of Germany. The pupils are required to bud, graft, transplant, plant seeds, etc., and they are given instructions on the subject of plant growth, adaptation of varieties to soil, climate, etc.